

xDesign Programming Interview Primer

The Interview

You will be invited to a 60 minute remote interview with 1 or 2 xDesign engineers, where you will be presented with a small, (mostly) working codebase. The interviewer(s) will be looking out for your ability to:

- Get to grips with the codebase
- Understand its functionality
- Assess its strengths and weaknesses
- Make some small code changes

Both you and the interviewer(s) will work with the codebase via [IntelliJ Code With Me](#). **Please ensure that you have the permissions required to install the IntelliJ IDEA lightweight client on your machine.** You will be prompted to install the client at the start of the interview.

The Codebase

The codebase implements a REST endpoint that gets a sortable, filterable list of Scottish hills (categorised as [Munros or Munro Tops](#)). To keep things simple, the data source is a CSV file that is loaded into memory when the application is running.

The functionality that the codebase *should* be implementing is:

- Filtering of search by hill category (i.e. Munro, Munro Top or none).
 - If this information is not provided by the caller, it should default to none.
- The ability to sort the results by height in meters and alphabetically by name. For both options it should be possible to specify if this should be done in ascending or descending order.
- The ability to limit the total number of results returned (e.g. only show the top 10).
- The ability to specify a minimum height in meters.
- The ability to specify a maximum height in meters.
- Queries may include any combination of the above features and none are mandatory.

Not all of the above functionality will be working as specified. As part of the session, the interviewer(s) will be assessing your ability to work with them collaboratively to identify and resolve bugs.